

Remarks

In view of the above amendments and the following remarks, reconsideration of the rejections and further examination are requested.

Initially, it is noted that the Examiner states that claim language recited after the term “wherein” or “whereby” is optional and does not limit the scope of a claim, relying on the Court of Appeals for the Federal Circuit (hereinafter Federal Circuit) decision of *Minton v. Nat’l Ass’n of Securities Dealers, Inc.*, 336 F.3d 1373, 67 USPQ2d 1614 (2003) (hereinafter *Minton*) cited in M.P.E.P. §2111.04. In making this statement, the Examiner appears to take the position that any time the term “wherein” or “whereby” is used in a claim, any limitation recited thereafter is necessarily optional and not entitled to patentable weight. However, this position regarding “wherein” clauses and “whereby” clauses is clearly incorrect in light of *Minton*, M.P.E.P. §2111.04, and the Federal Circuit decision of *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 74 USPQ2d 1481 (2005) (hereinafter *Hoffer*).

The Federal Circuit in *Minton* actually indicated that “a whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited.” Clearly what is meant by this statement, which relates to a method claim, is that if a “whereby” clause only states the intended result of a method step, it is not to be given patentable weight. It does not support the position that all “whereby” clauses and “wherein” clauses are “optional,” and therefore, not entitled to patentable weight. This is evidenced by the indication in *Hoffer*, also decided by the Federal Circuit, that the determination of whether each of these clauses is a limitation in a claim depends on the specifics of the case. Further, the Federal Circuit in *Hoffer* held that when a “‘whereby clause’ states a condition that is material to patentability, it **cannot** be ignored in order to change the substance of the invention” (emphasis added).

Additionally, it is noted that while the Examiner cites the first sentence of M.P.E.P. §2111.04, the Examiner completely ignores the second sentence which states [h]owever, examples of claim language ... that **may** raise a question as to the limiting effect of the language ...” (emphasis added). From this second sentence it is clear that “wherein” clauses and “whereby” clauses **may** not be entitled to patentable weight. Based on this discussion, it is apparent that, in actuality, “wherein” and “whereby” clauses are only deemed to not be entitled to patentable weight only in certain circumstances.

In reviewing claims 32 and 37, whose “wherein” clauses appear to be the reason for the Examiner’s statement regarding this issue, it is noted that they are used to further define characteristics of the plurality of multimedia data and the attribute information. Clearly, this usage of the “wherein” clauses is not in relation to the intended result of a process step as was the case in *Minton*. However, in an attempt to expedite the prosecution of this application, claims 32 and 37 have been amended so as to rewrite the “wherein” clauses.

Further, claims 32, 34, 36, 37, 39, 41 and 43 have been amended to make a number of editorial revisions thereto. These revisions have been made to place the claims in better U.S. form. None of these amendments have been made to narrow the scope of protection of the claims, or to address issues related to patentability, and therefore, these amendments should not be construed as limiting the scope of equivalents of the claimed features offered by the Doctrine of Equivalents.

Claims 32, 34, 36 and 37 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vallone (US 6,642,939) in view of Vynne (US 5,960,081) and further in view of Abdel-Mottaleb (“MPEG-7: Applications and Supporting Technologies”). Claim 35 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vallone in view of Vynne and Abdel-Mottaleb and further in view of Official Notice. Claims 38-41 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vallone in view of Vynne and Abdel-Mottaleb and further in view of Shoff (US 6,240,555) and Official Notice. Claims 32, 34, 36 and 37 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vallone in view of Vynne and further in view of Augenbraum (US 5,857,181). Claim 35 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vallone in view of Vynne and Augenbraum and further in view of Official Notice. Claims 38-41 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vallone in view of Vynne and Augenbraum and further in view of Shoff and Official Notice. Claims 32, 34, 36 and 37 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vallone in view of Vynne and further in view of Wright (WO 99/22502). Claim 35 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vallone in view of Vynne and Wright and further in view of Official Notice. Claims 38-41 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vallone in view of Vynne and Wright and further in view of Shoff and Official Notice.

The above rejections are respectfully traversed and submitted to be inapplicable to claims for the following reasons.

Claim 32 is patentable over the combination of Vallone, Vynne and Abdel-Mottaleb, since claim 32 recites a broadcast data receiving device for receiving and outputting broadcast data, broadcast on a designated channel, including a plurality of multimedia data and attribute information, the broadcast data receiving device including, in part, a receiving unit operable to sequentially receive the plurality of multimedia data and the attribute information, the plurality of multimedia data and the attribute information being included independently of each other in the broadcast data, and the attribute information including a table of information respectively corresponding to the plurality of multimedia data; and a managing unit operable to create management information for collectively managing the plurality of multimedia data and the attribute information, and to manage the plurality of received multimedia data with reference to the attribute information associated with the management information, the plurality of multimedia data and the attribute information being kept under management in association with each other. The combination of Vallone, Vynne and Abdel-Mottaleb fails to disclose or suggest these features of claim 32.

Regarding the rejections, it is noted that Vallone is relied upon as disclosing receiving broadcast data including a plurality of multimedia data and attribute information, the attribute information respectively corresponding to the plurality of multimedia data, and the attribute information and the plurality of multimedia data being included independently from each other in the broadcast data at column 5, lines 4-20; column 6, lines 29-44; and column 7, lines 24-38. However, it is submitted that these portions of Vallone are not properly supported in compliance with 35 U.S.C. §112, first paragraph, by U.S. Provisional Application No. 60/127,178, and therefore, are not entitled to the 102(e) date of March 30, 1999, as set forth in M.P.E.P. §2136.03(III). As a result, these portions of Vallone have a 102(e) date of March 30, 2000, which is after the priority date of June 11, 1999 of the present application.

Since a verified English language translation of JP 11-165939, having the priority date of June 11, 1999, was previously submitted on December 27, 2005, these claims are entitled to a filing date of June 11, 1999. Therefore, Vallone **cannot** be used as a reference against these claims. As a result, all of the above-mentioned rejections are moot.

Further, it is noted that U.S. Provisional Application No. 60/127,178 discloses a method for transmitting data used for ensuring that information in a central site database 100 is the same as information in a client site database as shown in Figure 1. Specifically, data contained in the central site database 100 is appropriately divided into a plurality of pieces of data (subsets), and the subsets are transmitted as object data to a client system 101 using a broadcast wave (e.g., a broadcast transmission 108) or a telephone line (e.g., a telephony server 111). The client system 101 collects the transmitted data so as to construct the same data as the data having been contained in the central site database 100.

Referring to "The Database of Television Viewing Information" section in U.S. Provisional Application No. 60/127,178, an object is described as a data item to be transmitted or collected. Further, referring to the "Basic Television Viewing Object Principles" section, television viewing objects are described as being structured as a collection of attributes. Therefore, it is clear that the attributes are portions of the objects. As a result, the attributes and object described in U.S. Provisional Application No. 60/127,178 are not independent from each other in the broadcast transmission 108 and cannot correspond to the claimed plurality of multimedia data and attribute information included independently of each other in the broadcast data as recited in claim 32.

Regarding Vynne, it discloses that digital data (watermark, signature), which is embedded in video data having been compressed, is extracted from the video data. Further, as shown in Table 3.1, signature information is extracted from a video frame so as to construct table information. However, in Vynne, the digital data is embedded in image data so as to make the digital data invisible, and the digital data having been embedded is extracted using a predetermined algorithm. This is apparent from the disclosure that "[t]he invention introduces the idea of adding an imperceptible or barely visible signature or a watermark to the images." (See column 9, lines 45 to 47). Thus, it is difficult for a third party to notice the presence of the digital data, and therefore, it becomes difficult to tamper with the digital data.

Based on the above discussion, it is apparent that it is not obvious, in view of Vynne, to separate the signature information from the image data. The separation of the digital data from the image data will allow a third party to notice the presence of the digital data and easily to tamper with the signature information. As a result, Vynne fails to disclose or suggest the

claimed plurality of multimedia data and attribute information included independently of each other in the broadcast data as recited in claim 32.

Regarding Abdel-Mottaleb, it discusses the MPEG 7 standard and discloses that a descriptor representing information indicating a feature of content is extracted from the content, such as audio data and video data, so as to effectively retrieve the content by using the descriptor having been extracted. (See page 61, the last paragraph starting in the left column and the first paragraph starting in the right column).

Further, the extracted descriptor is information indicating the feature of the content itself. This is because when the content is retrieved, the descriptor, instead of the content, is a subject to be retrieved, and therefore, the descriptor must contain information representing the feature of the content. That is, when the descriptor does not contain the information representing the feature of the content, the content having the feature desired by a user cannot be retrieved. This is apparent from the disclosure that "Feature extraction: Most of the work that has been done for image and video retrieval by content, has focused on either using low level visual features such as color, shape, and texture, or using full text retrieval." (See page 63, right column, section 3)).

Based on the above discussion, it is apparent that the descriptor, which appears to be relied upon as corresponding to the claimed attribute information, of Abdel-Mottaleb is information used for assisting in the retrieval of the content, which appears to be relied upon as corresponding to the claimed multimedia data. The descriptor is not information used for managing the plurality of multimedia data as recited in claim 32.

Further, the descriptor of Abdel-Mottaleb does not represent a table of information respectively corresponding to the plurality of multimedia data. Even if Vynne discloses the table information, the content of the table information cannot be applied to MPEG 7. That is, Vynne does not disclose or suggest that the digital data (watermark, signature) corresponding to the attribute information of the present invention is separated, and combining Vynne and Abdel-Mottaleb with Vallone does not disclose or suggest the present invention as recited in claim 32.

Based on the above discussion, it is apparent that the combination of Vallone, Vynne and Abdel-Mottaleb fails to disclose or suggest (1) the receiving unit operable to sequentially receive the plurality of multimedia data and the attribute information, the plurality of multimedia data and the attribute information being included independently of each other in the broadcast data, and the attribute information including a table of information respectively corresponding to the

plurality of multimedia data; and (2) the managing unit operable to create management information for collectively managing the plurality of multimedia data and the attribute information, and to manage the plurality of received multimedia data with reference to the attribute information associated with the management information, the plurality of multimedia data and the attribute information being kept under management in association with each other.

As for Shoff, Augenbraum and Wright, these references also fail to disclose or suggest the above-discussed features of claim 32.

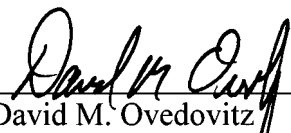
Claim 37 is patentable over the references relied upon in the rejections for reasons similar to those set forth above in support of claim 32. That is, claim 37 recites a broadcast data receiving method for receiving and outputting broadcast data, broadcast on a designated channel, including a plurality of multimedia data and attribute information including, in part, sequentially receiving the plurality of multimedia data and the attribute information, the plurality of multimedia data and the attribute information being included independently of each other in the broadcast data, and the attribute information including a table of information respectively corresponding to the plurality of multimedia data; and managing the plurality of multimedia data and the attribute information included in the broadcast data, and managing the plurality of received multimedia data with reference to the attribute information associated with the management information, the plurality of multimedia data and the attribute information being kept under management in association with each other, which features are not disclosed or suggested by the references.

Because of the above-mentioned distinctions, it is believed clear that claims 32 and 34-43 are allowable over the references relied upon in the rejections. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 32 and 34-43. Therefore, it is submitted that claims 32 and 34-43 are clearly allowable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that there are issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

Eiji UEDA et al.

By: 
David M. Ovedovitz
Registration No. 45,736
Attorney for Applicants

DMO/jmj
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
June 12, 2007